

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05100100-2012**
Application Received: **November 2, 2011**
Plant Identification Number: **051-00100**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Adaline Station**
Mailing Address: **RR 5 Box 100**
Cameron, WV 26033

Physical Location:	Cameron, Marshall County, West Virginia
UTM Coordinates:	530.4 km Easting • 4,401.6 km Northing • Zone 17
Directions:	Located in Liberty District, Marshall County and south of Cameron, which is 25 miles south of Wheeling on US Rt 250. From intersection in Cameron, travel west a short distance to a "Y" intersection. Go left, cross bridge, then up a hill on a brick road. Proceed south along this road (Cameron Ridge Rd) for approximately 7 miles to station that is on left side of the road and partially visible.

Facility Description

The Adaline facility is a natural gas transmission facility. The facility has the capacity to operate seven (7) days per week, twenty-four (24) hours per day. The Station's compressors and generators consist of three (3) 880 hp Clark HRA-8, 2SLB engines, two (2) 2000 hp Clark TLA-6, 2SLB engines, and one (1) 440 hp Waukesha VGF18GL, 4SLB emergency generator. Additionally, the station incorporates two (2) 1080 hp Solar Saturn T-1001 turbines. Besides the compressors, the station also operates a 3.48 MM Btu/hr heating boiler, three (3) DEG dehydration units, a mobile glycol reclaimer unit, and a 1 MM Btu/hr line heater all of which are fueled by natural gas.

The facility also utilizes several small storage tanks for natural gas condensate, wastewater, ethanol, methanol biocide, alcohol, DEG, used oil, diesel, gasoline, and mercaptan. The largest of which are the pipeline liquids tanks, A11 and A12, at 5,014 gallons. These tanks as well as tanks A08, A09, and A10 are all listed as pipeline liquids tanks.

As a result of this permit renewal, the A07 mercaptan tank as well as the pipeline liquids tanks, listed above were added to the equipment table due to their potential to create objectionable odors.

The mercaptan tank's MSDS was obtained from the company and found not to be methyl mercaptan, but propyl and butyl mercaptans which have reduced vapor pressures.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	157.43	20.74
Nitrogen Oxides (NO _x)	982.01	139.84
Particulate Matter (PM ₁₀)	11.65	1.74
Total Particulate Matter (TSP)	11.65	1.74
Sulfur Dioxide (SO ₂)	0.35	0.05
Volatile Organic Compounds (VOC)	52.54	12.73
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Acetaldehyde	2.41	Not reported
Benzene	1.37	0.33
Ethylbenzene	0.31	0.12
Formaldehyde	17.13	2.41
Hexane	0.18	0.01
Methanol	0.02	0.02
Toluene	0.96	0.25
Xylene (Mixed Isomers)	0.54	0.17
Total HAPs	22.96	3.31

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit approximately 982 tons per year of NO_x, 157 tons per year of CO, and 17 tons per year of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant and over 10 tons per year of an individual hazardous air pollutant (HAP), Columbia Gas Transmission, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Fuel Burning Sources
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Minor Source NSR Construction and Modification Permits
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Incorporation of 40CFR63 Standards
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63, Subpart ZZZZ	Major/Area Source RICE Standards
	40 C.F.R. 63, Subpart HHH	Natural Gas Transmission MACT
State Only:	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.
	45CSR17	Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2149C	01-13-2010	
R13-2362-P6	02-15-2000	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B, which may be downloaded from DAQ's website.

Determinations and Justifications

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The applicable requirements column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

Below is a discussion of applicable rules:

1. 45CSR4 – This facility is subject to 45CSR4 according to sections 3.1.4 & 3.4.3 of the permit.
2. 45CSR17 - *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.*

This rule sets a standard for fugitive particulate matter, which is not to be discharged beyond the facility boundary lines which causes statutory air pollution.

Compliance with this standard will be met by the facility by submitting a control plan, if the Director finds the facility in violation of this rule.

3. 40 C.F.R. Part 63 Subpart ZZZZ:

The facility is subject to this subpart because the facility owns and operates a stationary RICE at a major source of HAP emissions.

Since the Adaline facility is a major source of HAPs and was found to have one existing (1) 440 hp emergency generator engine, the unit will be subject to the emergency operating restrictions and work practice standards as specified under 40 C.F.R. §63.6640(f)(1) and §63.6602 Table 2c, Condition 6 respectively. The compliance date for these requirements is listed in §63.6595(a) as 10/19/2013.

Engines 08101, 08102, 08103, 08104 & 08105 are existing non-emergency SI 2SLB engines > 500 HP located at a major source of HAPs. According to 40 C.F.R. § 63.6595(a)(1) these engines have to comply with 40 C.F.R. Part 63 Subpart ZZZZ no later than June 15, 2007. However, according to 40 C.F.R. § 63.6590(b)(3)(i) and C.F.R. § 63.6600(c), these engines do not have any requirements under 40 C.F.R. Part 63 Subpart ZZZZ.

4. 40 C.F.R. Part 63 Subpart HHH:

The facility is subject to this subpart because it owns and operates a glycol dehydration unit at a major source of HAP emissions. This subpart was amended on August 16, 2012 eliminating the exemptions contained within §63.1274(d). Therefore, the facility's dehydration units are now subject to §63.1274(c) which specifies compliance with the control requirements within §63.1275, monitoring requirements of §63.1283, record keeping requirements of §63.1284, and reporting requirements of §63.1285.

The source was able to maintain the same control strategy of reducing emissions to below 1 ton per year of benzene, however, now it is a control option within §63.1275 instead of an exemption. The source shall become subject to these new requirements on October 15, 2012, the effective date of the new amended regulation.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR10 - The director has determined that 45CSR10 does not apply to engines; the engines do not meet the definition of a fuel burning unit in 45CSR§10-2.8 or a manufacturing process in 45CSR§2-2.11. Additionally there are no fuel burning units at the facility that exceed the applicability threshold for this Rule of 10 MM Btu/hr heat input capacity.

40 C.F.R. Part 60 Subpart Kb: This subpart does not apply to this facility because all the tanks at this facility are less than 75 cubic meters(m³) capacity.

40 C.F.R. Part 60 Subpart Dc

This subpart does not apply to this facility because there is no steam generating unit at this facility equal to or larger than 10 MM Btu/hr heat input capacity.

40 C.F.R. Part 60 Subpart JJJJ

Engines E01, E02, E03, E04, E05, & G3 were installed in 1954, 1954, 1956, 1961, 1961, and 1998 respectively; hence according to paragraph (a)(4) of 40 C.F.R § 60.4230 these engines are not subject to this rule.

40 C.F.R. Part 60 Subpart IIII

The provisions of this subpart are not applicable to this facility because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.

40 C.F.R. Part 60 Subpart GG

The provisions of this subpart are not applicable to this facility because the facility's turbines were installed in 1966, which is prior to the 1977 NSPS applicability date for these sources. Additionally no modifications have occurred since their original installation.

40 C.F.R. Part 60 Subpart KKKK

The provisions of this subpart are not applicable to this facility because the facility's turbines predated this NSPS's applicability date of February 18, 2005.

40 C.F.R. Part 63 Subpart YYYY:

The provisions of this subpart are not applicable to this facility's turbines because they were constructed prior to January 14, 2003.

40 C.F.R. Part 63 Subpart HH – This rule is not applicable to this facility because this facility is not an oil and gas production facility.

40 CFR 64 - No facility emission sources have add-on controls, with the exception of the dehydration units, which utilize flare control, but are exempt per §64.2(b)(1)(i) because they are subject to 40 C.F.R. 63, Subpart HHH; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: September 15, 2012

Ending Date: October 15, 2012

All written comments should be addressed to the following individual and office:

Jesse Hanshaw, P.E.
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Jesse Hanshaw, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1216 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Comments were received from the company via their consultant through email as follows:

DAQ's response is located below.

On behalf of Columbia Gas Transmission, Potesta offers the following comments on draft permit R30-05100100-2012 for Adaline Station.

- Page 5 of 43 Section 1.0 Emission Units- Unit 081G3- draft permit lists §63.6655 (e) and (f) as applicable. We believe (a), (b), and (d) are applicable as well. Subpart ZZZZ Footnote 1 of Table 2c should be added as an applicable requirement.

DAQ response: Emission unit 081G3 is an emergency generator which is subject to work practice maintenance requirements under 40 CFR 63, Subpart ZZZZ. As a result, they are not believed to be subject to the additional sections of §63.6655 cited as applicable within the comment. These sections along with what they apply to are summarized below.

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

With respect to section (a) it was deemed not to be applicable to the emergency generator since it was not subject to any emission or operating limitations.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

With respect to section (b) it was deemed not to be applicable to the emergency generator since it is not required to operate a CEMS continuous emission monitor or CPMS continuous parameter monitoring system. Although, the emergency unit does have to maintain a non resettable hour meter it is not considered a CPMS, which in practice has been reserved for monitoring operating parameters subject to limitations such as catalyst inlet temperature.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

The emergency engine in question is not subject to any emission or operating limitations, but is subject to work practice maintenance requirements from Table 6, condition 9. Although the emergency unit is subject to Table 6 it is not subject to any specific emission or operating limitations and therefore is not covered by this record keeping requirement.

The maintenance work practice standards are designed to reduce emissions however, they are not considered emission limitations or operating limits under this regulation. This regulation reserves the term operating limits for control device monitoring conditions such as catalyst inlet temperature or pressure drop. These conditions are defined as operating limits in Tables 1b and 2b.

The maintenance work practice provisions do specify that records be maintained to show compliance, but it was determined that (e) of this section would be the applicable recordkeeping section.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

With respect to the Table 2c, footnote 1, the DAQ agrees it is applicable since the emission unit is subject to condition 6 of this table, where the footnote is cited. However, it is the writer's opinion that it's not necessary to specify every footnote and that it is implied since it appears within the applicable condition. This decision was made in order to present the requirements of this permit in the clearest fashion possible.